

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

JUL 8 1997

In the Matter of)	
)	
Amendment of the Commission's Rules)	GEN Docket No. 90-314
To Establish New Personal Communications)	ET Docket No. 92-100
Services, Narrowband PCS)	
)	
Implementation of Section 309(j) of the)	PP Docket No. 93-253
Communications Act – Competitive Bidding)	
Narrowband PCS)	

REPLY COMMENTS OF MOTOROLA, INC.

I. Introduction/Summary

Motorola, Inc. ("Motorola") hereby submits its reply to the opening comments filed in response to the Commission's April 17, 1997, Further Notice of Proposed Rule Making ("Further Notice") in the above-captioned proceeding.¹ As discussed in detail below, the opening comments reflect widespread support for the recommendations set forth in Motorola's comments. In particular:

- Almost unanimously, the commenters agree that the Commission should not channelize and license the one MHz of reserve narrowband PCS spectrum at this time;
- All commenters addressing the topic oppose the issuance of future narrowband PCS licenses on the basis of Major Economic Areas ("MEAs"); and

¹ *Amendment of the Commission's Rules To Establish New Personal Communications Services, Narrowband PCS, Implementation of Section 309(j) of the Communications Act – Competitive Bidding, Narrowband PCS, FCC No. 97-140 (April 23, 1997) (Report and Order and Further Notice of Proposed Rulemaking) [hereinafter Further Notice].*

- The commenters addressing the issue agree that the Commission should retain the existing restriction limiting use of the paging response channels to mobile-to-base transmissions.

In view of the substantial record support for these positions, Motorola reiterates its request that the Commission formulate rules and policies governing future operations of new and existing narrowband PCS licensees consistent with these recommendations. In addition, for the reasons discussed in its opening comments, Motorola urges the Commission to allow limited operation of "land stations" on the narrowband PCS response channels.

II. The Vast Majority Of Opening Commenters Agree That This Is Not The Appropriate Time For The Commission To Channelize And License The Reserve Narrowband PCS Spectrum.

In its opening comments, Motorola urged the Commission to abandon its tentative conclusion that the one MHz of narrowband PCS spectrum reserved in the *PCS First Report and Order* should be channelized and licensed at this time. Motorola stated that, although narrowband PCS operators will eventually require access to the reserve spectrum, narrowband PCS operations are still in their nascent stages, and are not sufficiently mature to allow an informed and meaningful decision with respect to the best channelization and licensing plan for the reserve allocation.²

In particular, Motorola noted that most operators that have launched narrowband PCS systems currently provide service in only a few discrete markets and thus, are not yet fully deployed. As such, it is impossible to determine how these offerings will develop, what types of applications the market will and will not support, and the most effective channelization and

² Comments of Motorola, Inc., ("Motorola"), GEN Docket No. 90-314, ET Docket No. 92-100, PP Docket No. 93-253, at 7 (filed June 18, 1997).

licensing scheme for the reserve spectrum. Motorola submitted that, in these circumstances, it is preferable for the Commission to allow narrowband PCS operations more time to develop and then make informed and well reasoned decisions based on the types of services demanded by the public and the spectrum needs of narrowband PCS operators.³

The opening comments reflect almost unanimous agreement with this recommendation. In particular, the vast majority of commenters echo Motorola's observation that narrowband PCS operations are not yet sufficiently developed to permit an accurate assessment of how the reserve spectrum should be channelized.⁴ In addition, numerous commenters express concern that a decision to license and channelize the reserve spectrum at this time could actually harm the narrowband PCS industry.⁵

³ *Id.*

⁴ See, e.g., Comments of AirTouch Paging ("AirTouch"), at 19; Comments of American Paging, Inc. ("API"), at 2-3, 5; Comments of Ameritech Mobile Services, Inc. ("Ameritech"), at 7; Comments of Arch Communications Group, Inc. ("Arch"), at 6, 10; Comments of Benbow PCS Ventures, Inc. ("Benbow"), at 5-8; Comments of Celpage, Inc. ("Celpage"), at 7-9; Comments of CONXUS Communications, Inc. ("CONXUS"), at 16; Comments of Metrocall, Inc. ("Metrocall"), at 6-7; Comments of Morgan Stanley Partnerships ("Morgan Stanley"), at 4-6; Comments of PageMart, Inc. ("PageMart"), at 4-6; Comments of Paging Network, Inc. ("PageNet"), at 4-11; Comments of the Personal Communications Industry Association ("PCIA"), at 8-11.

⁵ See Comments of AirTouch at 18-20 (several factors militate against licensing the reserve spectrum at this time, including: (1) the fact that the Commission has not completed licensing of the initially allocated 2 MHz of spectrum; (2) the fact that commercial roll-out of narrowband PCS has barely begun; (3) the fact that there will be further advances in narrowband PCS technology for which spectrum should be reserved; (4) the fact that Congress recently questioned the timing of FCC spectrum auctions; and (5) the fact that licensing at this time would reflect a lack of constancy in the FCC's spectrum allocation process); Comments of Ameritech at 7 (additional allocations at this time could create ruinous competition for a new service, with a net deterioration of service to the public); Comments of Benbow at 6-7 (channelization and licensing of the reserve spectrum at this time "would force existing NPCS licensees to divert resources needed to complete initial system and service development to the purchase of reserve spectrum

In view of the strong sentiment of the commenters opposing channelization and licensing of the reserve spectrum at this time, Motorola agrees with PCIA's recommendation that, before any decisions concerning the reserve allocation are made, the industry should be given an opportunity to prepare a study of narrowband PCS spectrum usage needs.⁶ In addition, Motorola suggests that the reserve spectrum should not be channelized and licensed until narrowband PCS operations are sufficiently mature to permit an accurate determination of the most effective channelization and licensing scheme.

III. The Commenters Addressing The Subject Unanimously Agree That The Commission Should Not Issue Future Narrowband PCS Licenses On The Basis of Major Economic Areas ("MEAs").

In its opening comments, Motorola urged the Commission not to switch from MTA-based to MEA-based service areas for the issuance of future narrowband PCS licenses. Specifically, Motorola underscored the Commission's own observation that, because previously-

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that they may never need, simply to protect their existing investment"); Comments of Celpage at 8 (channelization and licensing of the reserve spectrum at this time could create a "spectrum glut"); Comments of CONXUS at 16 (channelization and licensing of the reserve spectrum at this time could "further depress . . . paging/narrowband PCS offerings"); Comments of Morgan Stanley at 4 (the release of more spectrum "before there is demonstrated demand for new licenses," will "inevitably have the effect of diminishing the value of existing licenses, and thus the valuations of present license holders, thereby further depressing paging company stock prices" and will adversely impact the ability of existing license holders to raise sufficient cost-effective capital to meet construction and coverage requirements); Comments of PCIA at 9-10 ("[p]remature release of the spectrum or the hasty adoption of an inappropriate channelization plan would have adverse effects for service to the public" and "increases the risk of decreasing investor confidence in the ability of existing licensees to execute their business plans").

⁶ See Comments of PCIA at 8-10; *see also* Comments of API at 2 ("development of a channelization plan for the reserved one MHz of narrowband PCS spectrum should be postponed pending an industry-initiated study of its spectrum needs, as requested concurrently in the Comments of the Personal Communications Industry Association.").

licensed regional narrowband PCS systems were configured through the aggregation of MTAs into larger regional areas, use of MEAs at this point would create inconsistencies between regional narrowband PCS boundaries and MEA-based boundaries.⁷ In addition, Motorola emphasized that switching to MEAs would frustrate efforts between existing and future licensees to aggregate additional spectrum, form consortia, and enter into roaming agreements over contiguous coverage areas.⁸ Motorola stated its belief that the Commission could not have intended such results, particularly in view of the fact that the *Further Notice* did not cite any reason for – or benefit to be derived from – switching to MEAs.⁹

The other commenters addressing this issue also oppose converting to MEAs. In particular, PCIA echoes Motorola's position that conversion to MEA-based service areas at this point would be inappropriate because regional narrowband service areas have been "built on the basis of MTAs."¹⁰ PCIA also notes that, "[l]icensees that hold both regional and MTA licenses may be able to achieve certain efficiencies, given the correspondence in boundaries. MTAs and MEAs are similar in many respects, but they are sufficiently different that the MEA boundaries would differ from the regional license borders."¹¹ Similarly, Benbow notes that, "[s]witching region boundaries to reflect the boundaries of aggregations of MEAs at this juncture will cause significant inconsistencies between the existing regional [narrowband PCS] boundaries and any

⁷ Comments of Motorola at 6.

⁸ *Id.*

⁹ *Id.*

¹⁰ Comments of PCIA at 6.

¹¹ *Id.*

additional licenses that are created in this proceeding.”¹² Benbow adds that, “[t]his will certainly frustrate the ability of existing regional licensees to acquire additional regional areas in order to create seamless-wide area coverage.”¹³

In short, the record reflects valid concerns that militate against the issuance of future narrowband PCS licenses on the basis MEAs. Significantly, no commenters actively supported the use of MEAs. Thus, there is no basis for conversion to MEA-based licensing and the Commission should end its inquiry into this issue.

IV. The Commenters Agree That The Commission Should Retain The Existing Restriction Limiting Use of The Paging Response Channels To Mobile-To-Base Transmissions.

Finally, the commenters addressing the issue agree that the Commission should retain the existing restriction limiting use of the paging response channels to mobile-to-base transmissions. In particular, in its comments, Motorola indicated that it opposes use of the response channels for base-to-mobile transmissions and described several ways in which removal of the restriction limiting operations on these channels to mobile-to-base transmissions could jeopardize future growth of two-way paging operations.¹⁴ Several other commenters, including Arch, Benbow, PageNet, and PCIA, express similar concerns.

¹² Comments of Benbow at 4.

¹³ *Id.* In addition, Benbow expresses concern that use of MEAs might cause licensees inadvertently to violate the spectrum aggregation limit by creating overlaps between old and new license areas. *Id.* at 4-5.

¹⁴ Comments of Motorola at 9.

For example, Arch points out that removal of the mobile-to-base restriction could increase the potential for interference at receive sites, particularly in view of the fact that there is a good possibility that receivers will be collocated with transmitters at base station facilities.¹⁵ In addition, echoing Motorola's concerns, PageNet notes that, "[t]he response channels are critical to the ability of existing 929 and 931 MHz and perhaps narrowband carriers to deploy some of the most spectrally efficient technologies, or to offer two-way services"¹⁶ Similarly, PCIA expresses concern that additional use of the response channels could create interference problems and indicates that it has called on its Technical Committee to commence a study of several related issues.¹⁷ No commenters appear to advocate removal of the mobile-to-base restriction. Accordingly, the record supports retention of this limitation.

In this same connection, Motorola reiterates its request that the Commission's rules be read to permit limited operation of "land stations" on the response channels.¹⁸ As outlined in Motorola's opening comments, if properly prescribed, these types of operations would not cause undue interference to other mobile-to-base transmissions and would allow meaningful and necessary applications, including low duty cycle transmissions of status or data from remote devices, such as meter reading. Motorola believes that the public interest would be served by

¹⁵ Comments of Arch at 11.

¹⁶ Comments of PageNet at 21.

¹⁷ Comments of PCIA at 12-13.

¹⁸ "Land stations" are defined in Section 2.1 of the Commission's rules as "[a] station in the mobile service not intended to be used while in motion." 47 C.F.R. § 2.1.

permitting such operations and submits that the limited land station functions envisioned in its opening comments are fully consistent with retention of the mobile-to-base restriction.

V. Conclusion

As the foregoing discussion demonstrates, the record supports the adoption of narrowband PCS rules and policies consistent with the recommendations contained in Motorola's opening comments. Accordingly, Motorola reiterates its request that the Commission formulate rules and policies governing future narrowband PCS operations that are consistent with these suggestions.

Respectfully submitted,

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